Claims:

1. A method for rapidly isolating nucleic acid from a nucleic acid source comprising the steps of:

a) lysing the nucleic acid source,

b) filtering the lysate through a porous matrix consisting of a material based on silica or of a silica coated material to bind the nucleic acid to the porous matrix in the absence of an alcohol and in the absence of a chaotropic salt,

c) eluting the nucleic acid from the porous matrix of step b) by using an aqueous buffer solution.

2. A method according to claim 1, wherein the nucleic acid is DNA.

3. A method according to claim 2, wherein the DNA is genomic DNA.

4. A method according to claim 1 to 3, wherein the nucleic acid is of a size ranging from about 10 kbp to about 50 kbp.

5. A method according to claim 1, wherein the nucleic acid source is any sort of biological tissue or cell material.

6. A method according to claim 5, wherein the nucleic acid source is mammalian cells, organs, biopsies, blood, serum, muscle, bone marrow, bacteria, yeast, and/or any sort of plant tissue or cells, like seeds or leaves.

7. A method according to claim 1, wherein the nucleic acid source is lysed using a buffer not containing a chaotropic salt and not containing an alcohol.

8. A method according to claim 1, wherein a RNase and/or a protease and/or lysozyme is added to one or more of the steps of claim 1.

9. A method according to claim 1, wherein the porous matrix comprises a siliceous oxide coated surface.

10. A method according to claim 1 or 9, wherein the porous matrix is a porous silica membrane.

11. A method according to claim 1, 9 or 10, wherein the porous matrix comprises pores having the size ranging from 0,2 μm to 3,2 μm.

12. A method according to claim 11, wherein the porous matrix comprises pores having the size ranging from 0,3 μm to 2,8 μm.

13. A method according to claim 12, wherein the porous matrix comprises pores having the size ranging from 0,5 μm to 2,0 μm.

14. A method according to claim 1, wherein the isolated nucleic acid serves as a template in a subsequent application like AFLP, RFLP, microsatellite analysis, southern blot, PCR or quantitative real-time PCR.

15. A method according to claim 14, wherein the isolated nucleic acid serves as a template in a subsequent PCR or subsequent quantitative real-time PCR application.

16. A method according to claim 1, wherein the lysate of step a) of claim 1 is centrifuged to eliminate cell debris from the lysate prior to step b) of claim 1.

17. A method according to claim 1, wherein one or more washing steps are performed subsequent to step b) of claim 1 and prior to step c) of claim1.

18. A method according to claim 17, wherein the washing step is performed using a washing buffer.

19. A method according to claim 1, wherein the porous matrix of step b) of claim 1 is a membrane embedded in a single column filter tube.

20. A method according to claim 1, wherein the porous matrix of step b) of claim 1 is a membrane integrated in a multi-well filter plate.

21. A method according to claims 19 and 20, wherein the membrane is assembled in one or more layers.

22. A method according to claim 21, wherein the pore size of one layer differs from the pore size of the other layer(s).

23. A kit for performing the method according to claims 1 to 22 comprising at least:

a) a porous matrix consisting of a material based on silica or of a silica coated material

b) a lysing buffer containing no alcohol and containing no chaotropic salt

c) an elution buffer.